

The Claims

1. A digital map display method including the steps:
 - (a) determining a position of a display device for the digital map;
 - (b) displaying the digital map at a first scale;
 - (c) determining a number of objects of a required category that occupy a predetermined area of the digital map as displayed;
 - (d) comparing the number with at least one set number of objects; and
 - (e) if the number is different to the set number, changing the first scale to a second scale.
2. A method as claimed in claim 1, wherein if the number is greater than the at least one set number, the second scale is smaller than the first scale.
3. A method as claimed in claim 1, wherein if the number is smaller than the at least one set number, the second scale is larger than the first scale.
4. A method as claimed in claim 1, wherein if the number is the same as the at least one set number, the first scale remains unchanged.
5. A method as claimed in any one of claims 1 to 4, wherein the at least one set number is a range between a maximum number and a minimum number.
6. A method as claimed in claim 5, wherein the second scale is a fixed percentage of the first scale; the second scale being greater than the first scale if the number of objects is less than the minimum number, and is less than the first scale if the number of objects is greater than the maximum number.
7. A method as claimed in claim 6, wherein the fixed percentage is in the range 25% to 75%, the maximum number is in the range 20 to 50, and the minimum number is in the range 5 to 20.

8. A method as claimed in claim 6 or claim 7, wherein the fixed percentage is in the range 60% to 70%.
9. A method as claimed in any one of claims 1 to 8, wherein the predetermined area of the display is a percentage of an area occupied by the display device height and width.
10. A method as claimed in claim 9, wherein the percentage is in the range 25% to 100%.
11. A method as claimed in claim 9 or claim 10, wherein the percentage is in the range 30% to 50%.
12. A method as claimed in any one of claims 1 to 11, wherein the position is determined using GPS.
13. A method as claimed in any one of claims 1 to 12, wherein the required category is one or more selected from the group consisting of: buildings, places of interest, intersections, road, parcel of land, and lot of land.
14. A method as claimed in any one of claims 1 to 13, wherein the digital map is a vector map.
15. A method as claimed in claim 14, wherein the number of objects is determined from at least one layer of a plurality of layers of the digital map.
16. A method as claimed in any one of claims 1 to 15, wherein the number of objects is obtained by a scan of the digital map as displayed.
17. A method as claimed in any one of claims 1 to 16, wherein the display is a split display having a left screen and a right screen having displays at different scales.

18. A method as claimed in claim 17, wherein the display of the right screen is of a larger scale than the display of the left screen, and the map displayed in the left screen forms an area immediately around the position as displayed in the right screen.
19. A digital map display method including the steps:
- (a) determining a position of a display device for the digital map;
 - (b) displaying the digital map at a first scale on a first part of a display screen of the display device; and
 - (c) on a second part of the display screen of the display device displaying at a smaller scale that part of the digital map surrounding the position.
20. A method as claimed in claim 19, wherein the first part is a right display and the second part is a left display.
21. A method as claimed in claim 20, wherein the left display is of the exact location within a relatively small geographical area that forms the area immediately around the position in the map of the right display.
22. A method as claimed in any one of claims 19 to 21, wherein the split is horizontal or vertical.
23. A computer usable medium comprising a computer program that is configured to cause at least one processor to execute one or more functions to perform the steps of any one of claims 1 to 22.